

# **EXHIBIT E**

Applicants : Michael Wayne Graham  
and Robert Norman Rice  
Serial No. : 10/646,070  
Filed : August 22, 2003

# Exhibit B

resion Battler A" contained lanolin or wool fat, but only trace amounts of a divalent metal. The president of the company stated by affidavit that no divalent metal was intentionally added to this compound by the company. Although laboratory analysis of the ash content of "Corrosion Battler A" did in fact reveal certain traces of various metals, both monovalent and divalent, the amounts found were insignificant and could likely be attributable to sources other than the soap of the compound. The Clearkin composition "Corrosion Battler A" does not in effect contain any "soap of a divalent metal," and this compound therefore cannot be said to infringe the Smith patent claims, all of which are specifically directed to emulsifying agents comprised of a fatty acid or organic soap of a divalent metal.

Plaintiff also alleges infringement of its patent by a compound known as Texaco Float Coat, supplied to the Navy by the Texas Company, although it does not rely on this fact for a showing of specific liability in the case. No proof has been submitted as to the composition of Texaco Float Coat.

In summary, it is concluded that claim 7 of the Smith patent in suit, relating to a single-step process for the prevention of rust, etc., is invalid in view of the disclosure of the prior Wakefield British patent. Claims 1 through 5 of the Smith patent are found to have been infringed by defendant's use of the Eureka Chemical Company's compounds E-220 and E-221 in the flotation method for removing rust. Defendant's use of the Clearkin Chemical Company's composition "Corrosion Battler A" (and Texaco Float Coat) is found not to come within the invention defined in claims 1 through 5 of the Smith patent.

It is recommended that a judgment be entered for the plaintiff on the issue of liability, and that the case be remanded to the commissioner for further proceedings under Rule 47(c) (2) to determine the amount of recovery.

## The SOUNDSCREE CORPORATION v. THE UNITED STATES.

No. 479-58.  
United States Court of Claims.  
May 13, 1966.

Action by patent holder against United States for compensation for unlicensed use and manufacture by or for certain States of inventions described in United States patents. The Court of Claims held that selected claims of Patent No. 2,803,413 relating to long-playing magnetic sound recorder-reproducer apparatus and devices used in conjunction with sound recording were valid, and that evidence established that United States had used invention without authorization. Judgment for claimant for \$3,000.

1. Patents  $\text{\textcircled{C}}112(8)$   
Patent issued by Patent Office is presumed valid. 35 U.S.C.A.  $\text{\textcircled{C}}282$ .
2. Patents  $\text{\textcircled{C}}312(14)$   
Burden of establishing invalidity of patent issued by Patent Office is on a party asserting invalidity. 35 U.S.C.A.  $\text{\textcircled{C}}282$ .
3. Patents  $\text{\textcircled{C}}112(8)$   
Presumption of validity of patent issued by Patent Office may be dispelled, especially by reference to pertinent prior art not considered by Patent Office. 35 U.S.C.A.  $\text{\textcircled{C}}282$ .
4. Patents  $\text{\textcircled{C}}28(14)$   
Though a device may be new and useful, it is not patentable if it consists of no more than a combination of ideas drawn from existing fund of public knowledge and if it produces results that would be expected by one skilled in the art. 35 U.S.C.A.  $\text{\textcircled{C}}103$ .
5. Patents  $\text{\textcircled{C}}28$   
Selected claims of Patent Numbers 2,743,319, 2,750,449, 2,826,642, 2,845,496, 2,915,695 relating to long-playing magnetic sound recorder-reproducer apparatus

tus and devices used in conjunction with sound recording were invalid as reciting mere aggregations of elements which were old in the art and produced no unexpected result. 35 U.S.C.A.  $\text{\textcircled{C}}103$ .

6. Patents  $\text{\textcircled{C}}18$   
Determination of obviousness must be made at time of invention, not through hindsight. 35 U.S.C.A.  $\text{\textcircled{C}}103$ .

7. Patents  $\text{\textcircled{C}}66(8)$   
Patent application filed subsequent to filing of application for patent attacked as invalid was not available as anticipatory reference against one of the claims of the patent attacked. 35 U.S.C.A.  $\text{\textcircled{C}}102$ .

8. Patents  $\text{\textcircled{C}}51(1)$   
To constitute "anticipation," all elements recited in claim or their equivalents must be found in one unit of the prior art. 35 U.S.C.A.  $\text{\textcircled{C}}102$ .

See publication Works and Phrases for other judicial constructions and definitions.

9. Patents  $\text{\textcircled{C}}51(1)$   
To bar patentability, prior knowledge and use must be "public knowledge and use," that is, it must have been accessible to the public. 35 U.S.C.A.  $\text{\textcircled{C}}102$ .

See publication Works and Phrases for other judicial constructions and definitions.

10. Patents  $\text{\textcircled{C}}42(8)$   
One who relies on prior knowledge and use to defeat patentability must sustain anticipation by clear and convincing proof. 35 U.S.C.A.  $\text{\textcircled{C}}102$ .

11. Patents  $\text{\textcircled{C}}155$   
Patent holder's disclaimer of claim dependent upon another claim of patent did not estop holder against charging infringement of the other claim.

12. Patents  $\text{\textcircled{C}}155$   
Structures defined by disclaimed claim of patent may be covered by other claims not disclaimed.

13. Patents  $\text{\textcircled{C}}155$   
Construction of patent after disclaimer has been properly entered must be the same as if the matter so disclaimed had never been claimed.

14. United States  $\text{\textcircled{C}}141(7)$   
Evidence established that devices defined in two patents which were subject of action for compensation by or for licensed States of invention claimed in two patents had been reduced to practice under terms of government contract, that the work had been paid for by funds charged to the contract, and that the government would be entitled to royalty-free license to use those patents if they had been found valid.

15. Patents  $\text{\textcircled{C}}314$   
In determining issues of infringement, one must look to patent claims.

16. Patents  $\text{\textcircled{C}}165(2)$   
Patent claims define what patent covers.

17. Patents  $\text{\textcircled{C}}178$   
The range of equivalents which can be accorded invention depends on degree of invention.

18. Patents  $\text{\textcircled{C}}170$   
The degree of invention is determined by state of the art.

19. Patents  $\text{\textcircled{C}}178$   
Where the art is crowded and the claims must be narrowly construed to be distinguished over prior art, the range of equivalents is narrow.

20. Patents  $\text{\textcircled{C}}178$   
Resilient means incorporated by reference into patent claims narrowly defined to distinguish over prior art cited by Patent Office were to be accorded narrow range of equivalents.

21. Patents  $\text{\textcircled{C}}328$   
Accused sound recorder-reproducer which did not utilize resilient means falling within range of equivalents accorded narrowly defined claims 6 and 18 of Patent Number 2,750,449 relating to long-playing magnetic sound recorder-reproducer apparatus and devices used in conjunction with sound recording did not infringe those claims, even if they were valid.

22. Patents  $\text{\textcircled{C}}328$   
Selected claims of Patent Number 2,803,413 relating to long-playing mag-

netic sound recorder-reproducer apparatus and devices used in conjunction with sound recording were valid.

23. *United States* 32-141(7) Evidence established that United States sued for compensation for unauthorized use and manufacture by or for itself of invention had in fact used the invention without authorization.

J. Philip Andregg, New York City, attorney of record, for plaintiff. Pennie, Edmonds, Morton, Taylor & Adams, New York City, of counsel.

Michael W. Werth, Washington, D. C., with whom was Asst. Atty. Gen., John W. Douglas, for defendant.

Before COWEN, Chief Judge, and LARAMORE, DUFFEE, DAVIS and COLLINS, Judges.

#### PER CURIAM:

This case was referred to Trial Commissioner Donald E. Lane with directions to make findings of fact and recommendation for conclusions of law. The commissioner has done so in an opinion and report filed on January 17, 1966.

Thereafter, on March 7, 1966, the parties filed a stipulation wherein it was stipulated and consented that the opinion, findings of fact and recommended conclusion of law in the report be adopted as the opinion, findings of fact and conclusion of law of the court. It was further stipulated that there be entered judgment for the plaintiff in the amount of three thousand dollars (\$3,000), no reasonable and entire compensation (including interest) for all unauthorized use and manufacture by or for the defendant of the invention described and claimed in U. S. patent No. 2,803,413, and as payment from defendant to plaintiff for a

\* The opinion, findings of fact, and recommended conclusion of law are submitted

paid-up, non-exclusive, irrevocable, non-transferable, royalty-free license to practice, and cause to be practiced for the defendant throughout the world for governmental purposes in the manufacture, use and disposition according to law, of any article or material, and in the use of any method, the invention disclosed and claimed in U. S. patent No. 2,803,413. Since the court agrees with the trial commissioner's findings, opinion and recommended conclusion of law, as hereinafter set forth, it hereby adopts the same as the basis for its judgment in this case without oral argument. The opinion and conclusion of the trial commissioner accord with the principles announced by the Supreme Court in *Graham et al. v. John Deere Company of Kansas City et al.*, 383 U.S. 1, 86 S.Ct. 884, 15 L.Ed.2d 645, and *United States v. Adams*, 393 U.S. 39, 86 S.Ct. 708, 15 L.Ed.2d 672, October Term, 1966, all decided February 21, 1966. Plaintiff is, therefore, entitled to recover and judgment is entered for plaintiff with the amount of recovery to be in accordance with the stipulation of the parties submitted after the commissioner's recommendation that the amount of recovery be determined under Rule 47(c) (2), as previously set forth.

#### OPINION OF COMMISSIONER \*

LANE, Commissioner: This is a patent suit under Title 28 U.S.C. § 1498 for just and entire compensation for the unauthorized use of plaintiff's patented inventions by the defendant. It is found that the selected claims of Letters Patent Nos. 2,750,449, 2,743,319, 2,826,642, 2,845,495, and 2,918,595 are invalid, and that the selected claims of Letters Patent No. 2,803,413 are valid and have been used without authorization in defendant's RD-115B/UN sound recorder-reproducer equipment. The patent claims in suit, the pertinent structures of the accused sound recorder-reproducers and associated equipments, and the prior art items urged by defendant are set forth

under the order of reference and Rule 57(n).

Cite as 360 F.2d 954 (1966)

in full detail in the accompanying findings of fact. The parties have agreed to and existing under the laws of the State of Connecticut and is the record owner of entire right, title, and interest in and to the following patents in suit:

#### PATENTS AND PATENT CLAIMS IN SUIT

No.	Patentee	Year	Claims
2,750,449	Thompson, et al.	1956	6, 15, 16, and 18.
2,743,319	Thompson, et al.	1956	1, 2, 3, 8, 9, 11, and 12.
2,803,413	Lyon	1957	1 and 2.
2,826,642	Lyon, et al.	1958	1 and 2.
2,845,495	Lyon	1958	7, 8, and 9.
2,918,595	Lyon	1959	1, 3, and 4.

The above-listed patents will hereinafter be referred to as the '449, '319, '413, '642, '495, and '595 patents.

The patents in suit relate to long-playing magnetic sound recorder-reproducer apparatus and to devices used in conjunction with sound recording. The '449 and '319 patents are directed to magnetic sound recorder-reproducers wherein a plurality of transducer elements is carried on the end face of a rotatable drum having its axis of rotation perpendicular to the direction of movement of a relatively wide magnetic tape. The transducer elements are adapted to contact the tape as the drum rotates under the moving tape so as to form a plurality of arcuate tracks across the width of the tape. The transducer elements produce magnetic tracks to record information on the tape and also serve to pick up from the tape the recorded information for reproduction. The '495 and '595 patents relate to drum type recorder-reproducers which utilize a plurality of transducer heads disposed about the peripheral surface of a rotatable drum having its axis of rotation parallel to the direction of tape travel. The transducer heads of the '495 and '595 patents contact the tape and describe a plurality of parallel transverse tracks at substantially right angles to the longitudinal axis of the tape. The

'319 patent relates to a reel clamp and handle combination while the '642 patent is directed to a bulk magnetic tape eraser or demagnetizer.

Although the field of magnetic recording-reproducing utilizing the principles of arcuate or transverse tracks is not a greatly crowded field, the patents in suit are not pioneer patents. The elements comprising the combinations claimed in the selected patent claims in suit are, in the majority, individually old and well known in the art of recording for the same purpose and function for which the patentees herein have used them.

Defendant has raised a number of defenses to plaintiff's charge of unauthorized use, asserting: that the claims in suit are invalid in view of the prior art; that the alleged invention defined in claim 6 of the '449 patent is invalid because it had been known to or used by others in this country prior to the invention thereof; that plaintiff is estopped to charge infringement of claim 6 of the '449 patent because plaintiff disclaimed a claim in the '449 patent which is dependent upon claim 6; and that defendant is entitled to a license and/or related rights under the '495 and '595 patents in suit and the alleged inventions covered thereby.

[1-3] The specific prior art items relied upon by defendant in its defense of fact.<sup>1</sup> By statute, 35 U.S.C. § 282, a patent is invalid if the patent claims in suit are set forth more fully in the findings of fact.

1. Of the many patents and publications cited by the defendant against the '440 patent in its answer to plaintiff's second amended petition, defendant has relied upon the following:

## UNITED STATES PATENTS

Patentee	No.	Date
De Forest	2,020,872	1936
Fulton	2,127,331	1938
Clark	2,188,030	1940
Cluskey	2,229,322	1943
Dunk	2,535,486	1950
Conners	2,163,723	1932 (Filed 1947)
Begun	2,004,550	1932 (Filed 1947)
Pond	2,020,404	1932 (Filed 1940)
Begun	2,152,911	1933 (Filed 1947)
Tickey	2,307,212	1934 (Filed 1950)

## FOREIGN PATENTS

British Marzocchi	407,800	1938
British Diamond	654,584	1951

## PUBLICATION

Begun, Magnetic Recording, Rinehart & Company, Inc., New York, 1949, pp. 106-107, 118-119.

None of the above-listed patents or publications was cited by the Patent Office during the prosecution of the '440 patent application.

Defendant has urged that the '310 patent claims in suit are invalid under 35 U.S.C. § 102 on the grounds that the invention claimed was fully anticipated by the prior art, and that the invention was obvious to those skilled in the art at the time it was made and therefore invalid under 35 U.S.C. § 103. In support of its defense of invalidity of the '310 patent claims in suit, defendant has cited the following prior patents and publications:

## UNITED STATES PATENTS

Patentee	No.	Date
Anderson	1,422,800	1922
De Forest	2,020,872	1936
Marzocchi	2,240,581	1941
Cluskey	2,229,322	1943
Dunk	2,535,486	1950
Kuhlow	2,245,107	1932 (Filed Apr., 1931)
Begun	2,004,550	1932 (Filed Jan., 1947)
Howell, et al	2,470,533	1953 (Filed May, 1947)
Hickman	2,648,689	1953 (Filed July, 1949)
Dembis, et al	2,703,714	1955 (Filed Oct., 1950)

## FOREIGN PATENTS

Great Britain, Marzocchi	407,800	1938
Great Britain, Diamond	654,584	June, 1951

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Note 1—Continued

## PUBLICATION

Begun, Magnetic Recording, Rinehart & Company, Inc., New York, 1949.

Defendant noted numerous prior patents and publications in its answer alleging invalidity of the '405 and '365 patent claims in suit as failing to patentably define over the prior art. Of those cited, defendant has relied upon the following:

Patentee	No.	Date
Fulton	2,127,331	1938
Clark	2,188,030	1940
Thompson et al	2,776,440	1956 (Filed 1931)
Masterman	2,773,139	1956 (Filed 1930)
Conant et al	2,813,024	1957 (Filed 1931)
Conrath	2,900,444	1959 (Filed 1933)
Barry	3,020,856	1962 (Filed 1932)
British, Marzocchi	407,800	1938

## PUBLICATIONS

Begun, Magnetic Recording, Rinehart & Company, Inc., New York, 1949, pp. 118-119.  
Barreton, Magnetic Recording of Long Duration, L'Onle Electrique, March 1954.

Defendant has urged that the following prior patents support his allegation that the '413 patent is invalid in view of the prior art:

## UNITED STATES PATENTS

Patentee	No.	Date
Henry	983,298	1911
Borinann	1,029,204	1912
Forbes	1,384,523	1915
Wendelbold	1,348,193	1920
Bradley	1,575,410	1920
Jusch	1,701,194	1928
Kendelmann et al	1,850,755	1932
Whelan et al	2,005,404	1935
Whelan et al	2,400,613	1949
Singleton	2,637,667	1953

None of the above prior patents was cited by the Patent Office against the '413 patent application.

Defendant has urged that the following prior patents support its allegation that the '412 patent is invalid:

## UNITED STATES PATENT

Patentee	No.	Date
Reeslyn	2,100,233	1938
Breth	2,134,946	1938
Hoschlyn	2,240,749	1941
Fussler	2,403,424	1946
Torgun	2,694,350	1952 (Filed 1947)

None of the listed prior patents was cited by the Patent Office.

sumed valid, and the burden of establishing invalidity is on the party asserting it. But this presumption may be dispelled, especially by reference to pertinent prior art which was not considered by the Patent Office. See *Scripto, Inc. v. Ferber Corporation*, 287 F.2d 308 (3d Cir. 1959), cert. denied, 361 U.S. 864, 80 S.Ct. 122, 4 L.Ed.2d 104. Such is the case of the prior art items relied upon most heavily by defendant herein.

[4] The test for patentability under 35 U.S.C. § 103 has been aptly stated by Judge Browning in *Griffith Rubber Mills v. Hoffar*, 813 F.2d 1, 3 (9th Cir. 1963), as follows:

Patents are issued not for private benefit but for the public good; they grant a monopoly for a limited period as an incentive to the disclosure of innovations which in the end will add to the fund of freely available knowledge. However, the public is entitled to benefit, without granting special concessions, from such advances as normally flow from the application of the ordinary skills of one in the trade to the existing fund of public knowledge. Thus the statute prescribes, as a condition of patentability, that what has been accomplished must be such that it would not have been obvious to a hypothetical person skilled in all that could have been known, at the pertinent time, in the field to which the invention relates.

It follows that though a device may be new and useful it is not patentable if it consists of no more than a combination of ideas which are drawn from the existing fund of public knowledge, and which produces results that would be expected by one skilled in the art.

[5, 6] The prior art patents and publications relied upon by defendant clearly show that the elements recited in the selected claims of the '449, '319, '642, '495, and '595 patents were well known in the magnetic recording art both individually and in various combinations. It is found that these claims recite more

aggregations of elements old in the art which produce no unexpected result and are therefore invalid. The test under 35 U.S.C. § 103 requires a determination of obviousness at the time the invention was made. This determination is not to be made through hindsight.

[7-10] Defendant has contended that the work of one Marvin Camras constituted prior knowledge and use by another in this country of the alleged invention defined in claim 6 of the '449 patent, a bar to patentability under 35 U.S.C. § 102. During 1949 and the period following, Camras worked on apparatus for recording and reproducing video signals used in television. His efforts ultimately culminated in a patent relating to a means for recording and reproducing video signals. The Camras patent application was filed subsequent to the filing of the '449 patent application and is therefore not available as an anticipatory reference against claim 6 of the '449 patent. To constitute an anticipation, all of the elements recited in the claim or their equivalents must be found in one unit of the prior art. See *Firestone v. Aluminum Co. of America*, 285 F.2d 928 (6th Cir. 1960). Prior knowledge and use must be public knowledge and use, that is, it must have been accessible to the public. One who relies on prior knowledge and use to defeat patentability must sustain such anticipation by clear and convincing proof. See *Consolidated Electronics Corp. v. Midwestern Instruments, Inc.*, 260 F.2d 811 (10th Cir. 1958). Defendant has not met this burden in the subject suit. The documents introduced by defendant at trial fail to disclose a slip clutch as recited in claim 6 of the '449 patent. Moreover, the weight of the evidence sustains a finding that the work of Camras was not accessible to the public.

[11-13] The '449 patent in suit issued on June 12, 1956. On June 28, 1956, plaintiff, as assignee of the '449 patent, filed a disclaimer disclaiming claim 10 of the '449 patent. Claim 10 is dependent upon claim 6, one of the

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'449 claims in suit. Defendant contends that plaintiff is estopped to charge infringement of claim 6 because of the disclaimer of claim 10. Defendant's contention is without merit. The Patent Office allows an invention to be defined through varying the scope of claim coverage. Through this practice, structures defined by a claim which has been disclaimed may be covered by other claims not disclaimed. The construction of a patent, after a disclaimer has been properly entered, must be the same that it would have been if the matter so disclaimed had never been claimed. *Dunbar v. Myers*, 94 U.S. 187, 194, 24 L.Ed. 34 (1876).

[14] Defendant has contended that the Government is entitled to an irrevocable, nonexclusive, nontransferable, royalty-free license to practice the inventions disclosed and claimed in the '495 and '595 patents in suit by virtue of a Government contract entered into by plaintiff and the Government. Briefly, said contract provided for the design and development of an airborne sound recorder-reproducer device. The contract initially called for both the acoustic principle and the linear principle approaches to recorder-reproducer devices. Prior to receiving the contract, plaintiff realized that a different approach to a recorder-reproducer would be required to meet the specifications under the contract. Plaintiff thereupon suggested to the contracting officer the use of a transverse type of recorder-reproducer which is the subject of the '495 and '595 patents. The details of the conception and reduction to practice of the devices disclosed and claimed in the '495 and '595 patents are set forth with more particularity in the findings of fact. The weight of the evidence shows that the devices defined in

[15-21] In determining the issues of infringement one must look to the claims of a patent. The patent claims define what is covered by the patent. See *Smith v. Snow*, 294 U.S. 1, 11, 55 S.Ct. 279, 79 L.Ed. 721 (1935). The range of equivalents which can be accorded an invention is dependent on the degree of the invention. This is to be determined by the state of the art. Where the art is crowded and the claims must be narrowly construed to be distinguished over the prior art, the range of equivalents is narrow. See *Pratt & Whitney Company, Inc. et al. v. United States*, 345 F.2d 838, 170 Ct.Cl. 829 (1965). The selected claims of the '449 patent in suit were narrowly defined to distinguish over the prior art cited by the Patent Office. Thus, the resilient means incorporated by reference into the '449 patent claims in suit must be accorded a narrow range of equivalents. The accused sound recorder-reproducer of American Measuring Instruments Corp. does not utilize a resilient means which falls within the range of equivalents accorded claims 6 and 18 of the '449 patent and therefore would not infringe said claims even if said claims were valid.

[22, 23] It is concluded that the selected claims in suit of the '449, '319, '642, '495, and '595 patents are invalid, but that the '413 patent claims in suit define a patentable invention which defendant has used without authorization of the owner.